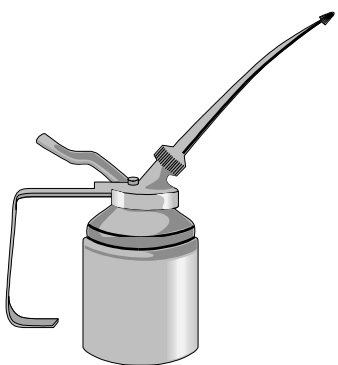




Cleaning Electric Motors



Have an experienced electrician inspect and recondition flooded electrical motors. If service is unavailable, repair and clean electric motors as follows:



- ① Disconnect motor and remove it from the mounting.
- ② Wipe all dirt from outer surface of motor.
- ③ Disconnect wires at motor, noting position on motor terminals.
- ④ Remove motor pulley, using a gear puller or a pair of C-clamps.
- ⑤ Mark end bells with center punch. Make one mark on pulley-end bell and two marks on the opposite-end bell. Mark housing the same way.
- ⑥ Use proper tools (box or socket wrench and screwdriver) to remove bolts holding end bells.
- ⑦ Use a soft-faced (plastic, wood or lead) hammer and screwdriver to tap end bells loose.
- ⑧ Remove the end that does not hold the starting switch or brush ring. Observe the position and number of shims as you remove the rotor.
- ⑨ Carefully remove the end containing the starting switch; this is attached to starter by permanent wires.
- ⑩ Use very fine sandpaper or crocus cloth to clean points, the commutator and brushes in a repulsion or universal motor. Do not use emery cloth.
- ⑪ Clean all parts of the motor using a non-flammable cleaning fluid. Do not use carbon tetrachloride; its fumes are very toxic. Do not get any liquid on wires. Blow and wipe parts clean.
- ⑫ Be sure bearings are clean and wicking is in place.

This document is IFAS publication DH 616.

Adapted by UF/IFAS from:
Document DH-076,
IFAS Disaster Handbook for
Extension Agents (developed
by the Cooperative Extension
Service for the benefit of
Florida's citizens)

Reassemble motor as follows:

- ① Pack wires in place on the end with the switch or brush ring.
- ② Insert rotor. Make sure shims are in place. Put a drop of oil on the bearing part of the shaft.
- ③ Replace other end bell.
- ④ Check position of end bells with center punch marks. The oil well should be up and the window bearing not in the line of pull.

- ⑤ Insert end bell bolts. Use a soft hammer to tap bells into place.
- ⑥ Turn the shaft by hand. If it is tight, end bells may not be in proper alignment or the wicking may be between the bearing and the shaft. The shaft must turn freely before the motor is energized.
- ⑦ Connect temporary leads, and test motor. Then fasten the permanent leads. If you don't have a soft-faced hammer, use a block of wood and a ball peen hammer. Do not force any part. With ball bearing motors, press end bells into position or tap lightly with a soft hammer.